

Exercise 2.1

Write a **for loop** that collects all the words in a list that are three letters long and places them in a list named 'result'.

Here is the list to work on:

```
test_list = ['the', 'be', 'of', 'and', 'a', 'in', 'to', 'have', 'it',
            'to', 'for', 'I', 'that', 'you', 'he', 'on', 'with', 'do',
            'at', 'by', 'not', 'this', 'but', 'from', 'they', 'his']
```

Note: This can be done as a *list comprehension* and you are welcome to do it that way.

Exercise 2.2

Write a **function** that takes degrees Celsius as an input argument and returns the equivalent temperature in degrees Fahrenheit.

Exercise 2.3

Write a function that takes a **variable number of numerical inputs** and returns their product.

e.g., `calc_product(2,3,4)` returns 24 (since $2 * 3 * 4 = 24$)

Exercise 2.4

Read the documentation on the **CSV File Reading and Writing** module and write a python program that reads the *stroopConditions.csv* file using **csv.reader()**.

Exercise 2.5

Create a 5x5 numpy array (matrix) populated with random values. (1) Save the array to a file named 'myarray.npy' using **numpy.save()** and (2) save the same array to a file named 'myarray.pkl' using **pickle.dump()**.

Exercise 2.6

Given the files created in Exercise 2.5 above:

Read-back the contents of 'myarray.npy' into a new array named 'newarray' using **numpy.load()**. Read-back the contents of 'myarray.pkl' into a new array named 'newarray2' using **pickle.load()**.